Spatial Information Technology Center at Fulton-Montgomery Community College

Final Technical Report

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Grant Management Overview

The Spatial Information Technology Center (SITC) at Fulton-Montgomery Community College (FMCC) continued to fulfill its mission and charter by successfully completing its fourth year of operations under Congressional funding and NASA sponsorship. Fourth year operations (01 Oct 03 – 30 Sep 04) have been funded and conducted utilizing an authorized Research Grant NAG 13-02053 (via a one-year no-cost extension expiring Sep 04).

Drawdown and reporting of fiscal activities for SITC operations passes through the Institute for the Application of Geo-spatial Technology (IAGT) at Cayuga Community College in Auburn, New York. Fiscal activity of the Center is reported quarterly via SF 272 to IAGT, this report contains an overview and expenditures for the remaining funds of NAG 13 – 02053. NAG 13 – 02053, slated for operating costs for the fiscal year FY02 – 03, received a one-year no-cost extension. SITC also received permission to use remaining funds for salaries and benefits through December 31, 2004. The IAGT receives no compensation for administrative costs.

This report includes addendums for the NAG award as required by federal guidelines. Attached are the signed Report of New Technology/ Inventions and a Final Property Report.

As an academic, economic and workforce development program, the Center has made significant strides in bringing the technology, knowledge and applications of the spatial information technology field to the region it serves. Through the mission of the Center, the region's communities have become increasingly aware of the benefits of Geospatial technology, particularly in the region's K-12 arena. SITC continues to positively affect the region's education, employment and economic development, while expanding its services and operations.

Center Overview

Outreach

During this reporting period, the Spatial Information Technology Center directly dealt with some 986 individual students, educators, businesses and government representatives in addition to an estimated population of exceeding 71,000 via broadcast and print media (see NASA Education Programs, Stennis Space Center, FMCC/STIC Staff Report Form – Summary Report). Of this population, more than 15% were K-12 teachers and higher education faculty, 75% students and 10% were individuals or from non-academic organizations.

Personnel

The Center began fourth year operations on October 1, 2003 with 100% of authorized full-time staff positions occupied. Funded positions included the Director, Operations Manager, Education Operations Coordinator, Technical Operations Coordinator and Program Secretary. In July 2004, the Operations Manager resigned and was replaced with a part-time employee with an average workweek of two-and-a-half days.

Facilities and Equipment

Capabilities of the Center continued to grow through this reporting period in every respect. This fiscal year saw the acquisition of new hardware and software driven by the recommendation of the OM. The Center has the capability to create and host GIS-based websites.

Credit and Non-Credit Higher Education

Enrollment in the community college level courses offered by SITC remains constant. SITC courses continue to attract non-traditional students, career-changers and professionals seeking to enhance their professional portfolios. In addition to the traditional college-level courses, Center staff has been highly successful in attracting participants in non-credit classes offered by FMCC's Business & Industry Center. Most popular are hands-on classes promoting the use of Global Positioning System receivers for recreational use and for outdoor industries, specifically New York State Loggers.

Business Activities

The Economic and Workforce development activities of the Center are on the rise. Collaborative arrangements are in affect with local businesses and governments. The Center is poised to seek additional revenue via contract agreements, new partnerships and broad collaborative relationships with education, business and government.

Program Accomplishments & Events

In general, fourth year operations proved to be highly successful for the Center, which saw participation in local, regional, national and international taskforces, conferences and events. The activities listed below indirectly support the 12 national applications of NASA and the Earth Science Applications objectives. A brief chronological listing and description of the major events follows:

October, 2003

New York State GIS Conference – The conference, held in Albany, NY, has attracted some 445 GIS professionals from business, government and education. The SITC staff participated in many aspects of the conference, including: meeting with the NYS Office for Technology; IAGT at Cayuga Community

College; ESRI, Plattsburgh State University's Remote Sensing program manager and other local GIS organizations to discuss possible partnerships with SITC. Staff also a GPS workshop for 15 attendees.

Mapping Our World Program – SITC welcomed three new K-12 teachers to begin the 3rd installment of GIS training for the *Mapping Our World* program. These teachers initially met twice a month for approximately three months, learning about GIS and its uses.

A computer was installed at Fort Plain High School to complete the second group of teachers who are participating in a program that brings GIS technology to K-12 students. This brings the total number of school districts who have completed the initial training to eight.

Criminal Justice Conference – SITC staff presented at the annual conference of the Criminal Justice Educators Association of New York State in Herkimer. Forty-five people, a mix of college educators, criminal justice professionals, and criminal justice students, attended the "standing-room only" presentation. The subject of the presentation was how the criminal justice field can benefit from spatial technologies (GIS, GPS, & Remote Sensing).

Healthcare Industry Luncheon – Staff attended a presentation on issues and challenges before the nation's healthcare industry. Approximately 65 guests attended the event that presented issues ranging from fiscal challenges, to geo-political issues for hospitals, HMOs and nursing homes. Discussions focused on how GIS can be used as a decision support tool for the healthcare industry.

Local General Electric Official Tours SITC Lab – A local retired General Electric employee, who is active in efforts to support local education, toured the Center facilities to learn about technology programs offered by FMCC. FMCC President, Dr. Barry Weinberg hosted the tour, followed by discussions of the college's needs.

Fulton County Chamber of Commerce – Fulton County Chamber of Commerce has enlisted SITC's help on a GIS project to analyze the their member base.

Schenectady City Schools Visit SITC – SITC entertained six visitors from the Schenectady City School District; the Science Coordinator, Math-Science-Technology Principal, and four teachers. Discussions revolved around the collaboration between these two schools in developing a one-semester high school elective course in GIS/Remote Sensing and/or provide this school's teachers with GIS software training and curriculum development.

FMCC Advising Staff – SITC gave a presentation to sixteen F-MCC faculty advisors. The time was spent illustrating the many different disciplines that currently use GIS and then answering specific questions regarding SITC course requirements, career paths, & the GIS industry.

Healthcare Industry Breakfast – FMCC and SITC hosted a presentation to demonstrate GIS technology and its benefits to Health Care professionals in Fulton and Montgomery Counties. Representatives of local hospitals, nursing homes, county public health organizations and chambers of commerce attended.

FMCC Class makes use of SITC Lab – An FMCC Environmental Science Professor brought twenty students to the SITC lab. They have collected rain samples for one month and have been using electronic pH meters to record the alkalinity of the rain. SITC staff converted the data so the students could plot the locations and analyze the data.

Engineering Firm visits SITC – Representatives from C.T. Male, a local Engineering firm, toured the Center and continued discussions on a partnership to jointly market services.

Curriculum / Program Review – SITC met with the Dean of Business & Technology to begin to discuss the use of DACUM (Designing a Curriculum) process to improve our academic offerings.

STEP Program – Staff conducted a presentation to eight local STEP students (Science Technology Entrance Program). The STEP program is a state-funded program that serves at-risk students, providing information and incentives related to their education.

GIS Meets Multimedia – SITC staff met with FMCC Multimedia course Instructor to discuss the creation of a new Multimedia "career track". This career track is designed to integrate GIS and multimedia into one college program. It is the intent that this unique track would attract additional students towards GIS and Multimedia studies.

Chamber Events Held – Staff attended both the Fulton County and Montgomery County Business after Hours events and presentations. Approximately 75 chamber members attended the Fulton County presentation while another estimated 75 participants were at Montgomery Chamber member. These events provide for the promotion the Center and have directly contributed to our high profile in the community.

Internal Course Planning With V.P. – Both SITC administrators met with FMCC Vice President for Student and Community Services, and FMCC Director of Workforce Development to discuss the promotion of non-credit and non-academic programs offered by the college.

Multimedia Student Presentation – Staff presented to 8 college multimedia students about GIS, GPS, and web-based GIS applications.

November, 2003

NEARC Conference – Staff attended the North East Arc Users Conference (NEARC) in Rhode Island. There were over 600 attendees at the NEARC conference. While there, SITC aided with the instruction in the use of the *Mapping Our World* textbook. Staff also met with many other GIS educators and professional.

FMEI Planning Meeting – The Chair of the Fulton-Montgomery Education Initiative (FMEI), visited the Center along with four other FMEI representatives to plan an upcoming presentation to the Mohawk–Sacandaga School Districts Association. The Mohawk–Sacandaga group is a coalition of K-12 Boards of Education who meet regularly to discuss trends and issues in local education.

Mohawk Valley Heritage Corridor Commission – MVHCC Regional Tourism Coordinator visited SITC in search of GIS-based solutions to promoting the region's tourism. The commission is looking for help in preparing a business plan, cataloging documents, software, hardware, and vendor selection as well as generating digital maps for the region. Staff has also completed a mapping project for MVHCC; the maps depicted the U.S. Congressional, NYS Senatorial and NYS Assembly districts contained all or in part within the Mohawk Valley Heritage Corridor.

Fulton County Regional Chamber of Commerce – Staff met with the Fulton County Chamber of Commerce met to discuss the inconsistencies in the membership database. Because many of the addresses were outdated or incomplete, only a small portion of the database could be geo-coded using ArcGIS. Staff also attended a Chamber retreat for board members where 23 board members and invited guests participated in goal setting and strategic planning.

Business Class tours SITC – Two FMCC Principles of Business classes toured the SITC lab and received one-hour presentations about GIS and business applications. A total of 57 students attended the presentations.

FMCC Leadership Visits NASA-Funded Program at Cayuga Community College – FMCC President and Vice President and Dean of the College visited Cayuga Community College, home of the Institute for the Application of Geospatial Technology and NASA's Regional Application Center of the Northeast. The senior leadership of FMCC traveled to meet with their counterparts at Cayuga to review the operational relationship between our two institutions and discuss the opportunities for future collaboration.

Mapping Our World Program Continues – Staff continued to meet with the K-12 teachers from school districts within Fulton and Montgomery Counties in the *Mapping Our World* teacher-training program.

FMCC Meets With Local High School – SITC staff joined the Dean of Business, Technology and Health Professions in presenting FMCC programs to teachers and administrators of Ballston Spa High School in Saratoga County. Four technology teachers and the high school principal learned of FMCC's articulation agreements, early admit programs and the "College in the High School" program.

Program Presented at ESRI's Open House – Three members of the SITC staff traveled to Boston to present at ESRI's Northeastern U.S. Open House. While there, the staff visited some two-dozen vendors, networked with the more than 100 participants and presented an FMEI (Fulton-Montgomery Education Initiative)-SITC program overview. Discussions arose about the possibilities of increasing the interaction between ESRI and SITC, including use of our GIS lab for ESRI-sponsored activities.

FMEI Leadership Speaks At Regional K-12 Forum – During the monthly meeting of the Mohawk-Sacandaga School Districts Association six key leaders from FMEI provided a 45-minute talk on the goals, activities and potential that FMEI offers to area schools. The Chair of FMEI, FMEI Program Officer, FMEI Secretary, the Vice President and Dean of the College, SITC Director SITC, and Education Operations Coordinator took part in the presentation. Ninety-three K-12 administrators, board of education members and guests attended. The FMEI presenters were followed by the presentation of an architectural design proposal to develop a 49 million dollar campus for the Hamilton-Fulton-Montgomery Board of Cooperative Educational Services (HFM BOCES) to be located adjacent, and joining, the present community college campus. This proposal may be a first of its kind for New York State, and would result in the co-location of a variety of mutually supportive programs for each institution. Most notable among these would be K-14 geospatial technology programs. If approved, the new campus is slated to be open by Fall 2005.

Bard College Project – A Bard College representative visited the STTC lab and utilized Center resources to create and printed five large maps of the campus facility and utilities. This visit was part of an ongoing effort to utilize SITC capabilities and promote GIS awareness.

NEARC Conference Planning Meeting – Staff traveled to Plattsburgh State University to attend the Adirondack ArcUsers meeting and initial planning session for the Northeast ArcUsers conference to be held in Lake Placid, NY September 19th – 22nd, 2004. SITC has volunteered to oversee the Education track of the conference. During the meeting, SITC presented an overview of our *Mapping Our World* teacher professional development program to the 23 participants. Three other educators and a representative from New York's Office of Cyber Security also presented programs and activities.

Bowne Management Systems, Inc. – Staff met with the Vice President of Bowne Management Systems regarding the possibility of collaborating on GIS projects. Bowne Management Systems, Inc is a New York City company that has been awarded New York State contracts in both GIS and Technology Management and Consulting.

Software Installation – Staff installed SQL Server, ArcSDE and ArcIMS. Microsoft's SQL Server is an RDBMS; ArcSDE allows spatial data to be stored in an RDBMS. ArcIMS is used to create GIS-based websites.

NYS GIS/LIS Association – Staff joined the New York State GIS LIS Organization and attended a meeting in Albany. SITC offered to set-up and host the organization's website.

Teachers Visit Center – Two elementary school teachers from the Gloversville Central School District visited the Center. The educators have volunteered to be among the first trained in GIS technology as part of the FMEI (Fulton-Montgomery Education Initiative) consortium's *New Visions* program, which will formally develop GIS curriculum in area schools.

Office Technology Lecture – Staff provided a presentation to eight students of the Office Technology class. The students received a first hand look at the variety of MIS/IT equipment used in the geospatial industry.

December, 2003

Center's Associate of Science Degree Modified – Staff recommended changes in the Spatial Information Technology associates degree to the Technology division and to the Academic Policy committee. The changes were made to better reflect the evolution of the technology and to better define the path for transfer to four-year institutions.

Project LIFT – Staff presented to five members of Project LIFT (Living Independently for Tomorrow). This project, supported by the NYS Department of Labor, is designed to retrain displaced workers preparing them for reentry into the job market.

New York State GIS Education Workgroup Meeting – Staff participated in the quarterly NYS GIS Education Workgroup meeting. The meeting focused on the implementation of statewide GIS training programs, geared towards both businesses and GIS education in primary schools. Some of the ideas discussed included using regional BOCES sites to get in touch with local school districts, and presenting at upcoming NYS Associations of Counties and Towns.

Capital Region Tech-Prep Consortium Meeting – Staff joined 22 other capital region educators at a meeting of the Capital Region Tech-Prep Consortium. The meeting featured the unveiling of plans for a Tech Prep Clearinghouse to serve students, parents, guidance counselors and employers of the 17-county Tech Valley region. Tech Valley is the greater Capital District area of New York that is anticipated to experience high growth in technology employers over the next several years. SITC Director was invited to join the consortiums Clearinghouse Advisory committee. Among the first tasks will be to further develop the Clearinghouse's web site content and to seek funding for future programs. SITC was recognized as being one of the area's strongest and most promising programs for area students interested in technology careers.

Presentation at CT Male – Staff gave an ArcIMS presentation, including web server technologies, languages, and web-based GIS applications to CT Male in an ongoing effort to pursue projects together.

NYS GIS/LIS Association – SITC has registered the Association's domain and is continuing to work on website content.

Meeting With Local School Teacher – Staff met with Schenectady High School teacher to discuss developing a summer camp for middle school students in which GIS would be one component. SITC shared our experiences, activities and "lessons learned".

Public Forum Held at Capital – Staff attended a forum hosted by the Public Policy Institute and Business Council of New York. The focus was a discussion of the economic and business climate of the State in order to allow organizations to best prepare to succeed. Approximately 85 participants, elected officials, educators and presenters attended the daylong forum.

High School Student Presentation – Staff presented to 25 visiting Junior and Senior High School students along with 2 faculty members from the Amsterdam school district. The presentation included GIS applications in Criminal Justice and an overview of GIS, GPS and Remote Sensing technologies.

Mapping Our World Program Continues – SITC continues to meet with the six teachers from school districts within Fulton and Montgomery Counties in the *Mapping Our World* teacher-training program.

BOCES – SITC met with an Otsego Northern Catskills (ONC) BOCES teacher and two of his students. The time was spent GPS, GIS and orthoimagery with real-world example and hand-on demonstration.

Bowne Management Systems Inc – Staff met with the New York City firm to discuss the establishment of a business presence in the Albany NY area, with special interest in opportunities within New York State government. A Bowne/SITC partnership was discussed as an opportunity to penetrate the Albany market.

Earth Science Class – Marcia Craft, a K-12 teacher and *Mapping Our World* participant, spent time in the SITC lab with her ten Earth Science students. The time was spent on GPS, GIS and orthoimagery with real-world example and hand-on demonstration.

ArcIMS Cost / Benefit Analysis – Staff has begun a cost/benefit analysis for GIS-based websites. This document will help to secure ArcIMS projects.

Quarterly FMEI Meeting Held – Staff attended the quarterly meeting of the Fulton-Montgomery Education Initiative (FMEI). Fifteen members discussed upcoming FMEI initiatives and programs, SITC staff changes and the election of new FMEI officers.

January, 2004

CHOICES Youth Summit Held On Campus – On January 7th more than 150 local area high school students visited the FMCC campus for a full day of presentations and seminars to encourage students to live healthy lifestyles and introduce positive alternatives to drugs and alcohol. SITC staff provided three presentations to two-dozen students with a focus of "What it takes to work for NASA", emphasizing the need for skilled workers and strong math, science and technology abilities. The event, including the SITC presentations, received highly favorable local media coverage.

New York State Links To SITC Site – The New York State GIS Clearing House has added a link on their website to the SITC's website. This link provides a tutorial on the procedure to locate aerial photography, created by an Empire State College multimedia student.

NYS GIS/LIS Association – The Center has completed the design of the Association's website, http://www.nysgislis.org. It was presented and the Association's meeting where 19 members from a variety of different organizations including, state and local government and private organizations were present.

Tech Valley Publication Covers Center – The *Tech Valley Times* visited the center to prepare an article about SITC. The monthly magazine features the latest news in technology-based companies and initiatives in New York's 17-county *Tech Valley* region.

Local Radio Station Interview – The Director participated in an on-air interview with WCSS radio. The station was covering local perspective on the recent Mars landing of NASA's *Spirit* rover. The center has received considerable attention and requests for information relating to this event and this has presented opportunities to discuss remote sensing and GIS technology.

Work Study Student Interviews – Staff interviewed five students who are interested in working with SITC as student aids.

FMEI GLOBE Teacher Leads Students In NASA's Mars Activity – Marcia Craft, a ninth-grade earth science teacher at Northville Central School and GLOBE (Global Learning Opportunities for a Better Environment) Star Teacher has answered NASA's request for school children to gather rocks from their local community and send them to NASA to be analyzed by the same type of equipment being used by the Mars Rover. Since the first rock NASA will study on Mars has been named "Adirondack", Ms. Craft felt she and her students "had to participate!" She will assist a 2nd grade and 5th grade teacher to obtain local rocks from the foothills of Adirondack Mountains. They will use GPS to receive coordinates of the rocks and send the information and rocks to NASA.

SUNY Cobleskill –SUNY Cobleskill President visited the college and received SITC presentation. An articulation between the two colleges was discussed.

SITC-FMCC Program Meeting – Staff met with the Vice President and Dean of the College to discuss future non-academic opportunities for the Center; including the need to upgrade current hardware and software to enable the Center to offer data warehousing and web-based GIS. These enhancements would also improve the academic programs of the college.

Capital Region Tech-Prep Consortium – Staff attended the Consortium technology committee meeting in Albany which is working to develop an Internet-based data warehouse for high school counselors, students, parents and employers. The committee has drafted the architecture for a web-based warehouse and is now looking for a researcher to conduct interviews, map career opportunities by industry and write content for the web page project. Ten of the committee's 14 representatives from area colleges, New York State Department of Education and SUNY's Two-Year College Development Center attended

Campus GIS Project – Staff and met with Vice President of Student and Community Services about a GIS project that will help analyze the distribution of FMCC's students. The project involves acquiring data for state, county, zip code, and school district boundaries and than preparing tools to perform analysis to better understand the past distribution.

Speaker Addresses The Future of Education – The Hamilton-Fulton-Montgomery Board of Cooperative Educational Services (HFM BOCES), in cooperation with SITC, FMCC and FMEI (Fulton-Montgomery Education Initiative), hosted education visionary, author and speaker Mr. Ian Jukes, of *The Info Savvy Group*. Mr. Jukes' focus was on the need to restructure educational institutions to become relevant to the current and future needs of children. Approximately 75 people attended the afternoon session on campus.

Experimental Aircraft Association (EAA) – Eleven members from the local chapter of the EAA visited the SITC facilities and received presentation on GIS, GPS and Remote Sensing technologies and capabilities.

Work-Study Program – One of our GIS program students has been hired by the Center as a work-study student. She will be assisting in installation of hardware and software, acquiring data, performing GIS analysis and helping the design and maintenance of the current database and web sites.

Office Technology – FMCC Office Technology program has arranged with the Center to use the SITC class and conference rooms during his spring 2004 classes. OT students will become familiar with Center's office technology resources as good examples of some of the newest equipment they may come into contact with following graduation.

NYS Projects – An independent contractor to New York State met with the Center discuss our availability to complete State projects.

Healthcare Firm Interested in Local GIS Information – Blue Shield of Northeastern New York has requested quotes on developing a two-county GIS product that would allow Blue Shield to identify senior citizens who may qualify for health care assistance through state and federal programs. The Center is designing a proposal for the project.

Annual State of the County Report Presented – SITC and FMCC representatives joined some 240 local residents and area leaders at the State of the County report delivered by the Fulton County Administrator. This year's annual report highlighted the importance of public water and waste systems to the FMCC campus.

Mapping Our World Program – Staff met with a teacher from Northville Central School District to discuss resuming *Mapping Our World* classes. A plan was devised to reconvene participating teachers to reconvene, while inviting new teachers.

February, 2004

Workforce Development Forum – Staff attended a forum entitled "Creating a Competitive Economic and Workforce Advantage." Two hundred fifty regional economic and workforce development professionals participated in round table discussions using local labor force demographic information to analyze Capital Region needs for skilled employees over the next three to five years.

Communications-Technology Committee Meeting – The Center's Director co-chaired a joint meeting of the Fulton-County Chamber of Commerce's Comm-Tech and Economic Development committees and led a discussion to host an economic development forum and seminar in the Spring 2004. The college will be the most likely site for this public forum to examine area needs for communication-technology infrastructure. Fourteen chamber board members and area business representatives took part in the two-hour meeting.

Articulation Agreements Outlined – Center staff met with FMCC's Education and Career Planning Specialist who coordinates the College's transfer agreements. The group discussed pending, and potential, articulation agreements with the State University of New York at Plattsburgh, the University at Albany and the State University of New York at Oswego.

Interns and Student Aides – SITC is working with FMCC's Student Development Center to identify and assign one intern and two work-study students to assist us in completing a number of in-house projects.

C.T. Male & SITC Prepares Proposal —CT Male & SITC submitted a joint proposal to the Town of Lloyd for an ArcIMS website to serve GIS data to residents of the Town.

SITC Website Design – Staff began work on a new format for SITC's website.

GIS Service Research—The business processes of Realtors and insurance companies are being researched to determine the need and/or current use of GIS/web applications.

NYS GIS/LIS Association - SITC is completing series of updates to the association's website.

Student Aide Joins Staff – A visual communications major at FMCC will be working with the SITC staff to design and publish a commercial-quality, multi-year report on the program's accomplishments and milestones.

Oneida County BOCES— Three representatives from the Oneida County Board of Cooperative Educational Services (BOCES) visited the Center to discuss how they might work with SITC to develop GIS programs for their twelve K-12 component schools. The staff and guests discussed the Center's mission and services to K-12 schools including teacher training, summer camp for teens, the GLOBE (Global Learning Opportunities for a Better Environment) program and the resources of the Center that could be made available to the Oneida County system.

FMEI – The superintendent of the Broadalbin-Perth Central School District, and incoming Chair of the Fulton-Montgomery Education Initiative (FMEI), visited the Center and received an orientation on the charter and mission of SITC. The group also included two other officers of FMEI and FMCC's Vice President for Student and Community Services.

Albany-Colonie Regional Chamber of Commerce/Tech Valley meeting – Staff met with the Economic Development Director of Albany-Colonie Chamber of Commerce to explore the possibility of working together in GIS projects.

C.T. Male – Staff continued to discussions on the joint marketing opportunity of SITC and C.T. Male with C.T Male's GIS Manager.

March, 2004

Education Program Planning Meeting - SITC staff recently held an information session on K-12 outreach successes and the Center's direction for the future. The four-member group discussed various programs such as Community Atlas, *Mapping Our World* teacher training and the GLOBE (Global Learning Opportunities for a Better Environment) partnership operations. In addition, lesson plans, continuing education credit, and New York State education standards were discussed.

IAGT – Center staff traveled to Cayuga Community College to meet with staff of the Institute for the Application of Geospatial Technology (IAGT). SITC staff toured the Institute and discussed its operations, organization, staffing and technology. IAGT's Chief Operations Officer and IAGT's Education Coordinator were present to discuss similarities each center is undertaking for K-12 outreach, education initiatives and programs. Goals and programs are closely aligned, and IAGT proved to be a good resource for understanding the K-12 arena.

Project Management Meeting — Center staff attended the Albany Chapter meeting of PMI (a professional project management group) and spoke with the Assistant Director & CIO of NYS Cyber Security & Critical Infrastructure (CSCIC), about recent RFP's that CSCIC has posted. More than 20 project managers attended the meeting, five from NYS management teams.

Fulton County Chamber of Commerce – A proposal was submitted to FCCC to map Fulton County Businesses.

Security Seminar – Staff attended computer security seminar entitled "How to Defeat the Hacker and Understanding the Need for Security" along with 15 senior security managers and information officers.

Science Organization Rep Visits Center – A retired science teacher of Schenectady High School and representative of Union College visited the Center and extended an invitation to present at an upcoming science educators conference.

Director Nominated to State Organization – Mike Flinton received notice that he has been nominated for a three-year term to represent academia on the New York State GIS Coordinating Body, a state-level organizations under the auspices of the New York State Office of Cyber Security and Critical Infrastructure Coordination (CSCIC). The 19 member organization coordinates, promotes and facilitates the development, effective use, and sharing of geographic information by working to remove barriers

Fulton County Economic Development Corporation – SITC produced a map of the Estee School building and surrounding area for the EDC.

Mohawk Valley Heritage Corridor Commission – MVHCC has requested additional prints of regional political boundaries created by SITC.

NEARC Conference Planning Meeting –Staff participated in the second planning meeting for the September 2004 Northeast ArcUsers conference to be held in Lake Placid, NY.

Criminal Justice presentation – Staff gave a presentation to 41 Criminal Justice students. The presentation included GIS applications in Criminal Justice and an overview of GIS, GPS and Remote Sensing technologies.

Project Ideas – Staff presented to FMCC Administrators the potential of completing revenue generating projects, the investment requirements and a cost/benefit analysis.

NYS GIS/LIS Association— Staff presented the status of the web site to more than 20 NYS GIS professionals at the meeting. Other issues discussed were, professional development and continuing education, certification, and logo contest.

Mapping Our World Reconvenes – SITC held a meeting for ten area teachers who have gone through our ArcView Training. The focus for the group is putting together a repository of lesson plans and ESRI's Community Atlas Program.

NYS Crime Mapping System – Staff visited the NYS Crime Mapping facilities and received a presentation on the capabilities and uses of crime data by the agency.

National Science Foundation - Staff presented GIS, GPS and Remote Sensing to 8 members of the National Science Foundation's New York State Professional Development Collaborative (NYSPDC).

Physical Geography – Staff met with FMCC Dean of Arts and Sciences to discuss offering a 3-credit Physical Geography course.

Articulation – Staff met with SUNY Albany's Geography and Planning Department Chair to discuss articulation between SUNY Albany and FMCC's Spatial Information Technology program.

Department of Labor – The Director attended a conference on the Geospatial Information industry in Washington DC with forty participants. This session focused on creating structure and workforce development actions for the industry.

Fulton County Chamber of Commerce – President of FCCC signed a contract to execute mapping project the Center had proposed.

Superintendent's Day - Staff presented at Amsterdam Central School District's Annual Superintendent's Day to fifteen teachers. The session focused on Spatial Information Technology and resources available to K-12 school teachers, the *Mapping Our World* Program.

Science Teachers Association of New York State – Staff attended STANYS Eastern Section Lab Day at Union Coilege. Science teachers from the area attended learned of resources offered to teachers.

State University Research Foundation Recognizes Center Partners – FMCC, NASA and the Fulton-Montgomery Education Initiative were honored in a formal ceremony in Albany. The *Partners in Leadership* Award recognizes the accomplishments of SITC, and its collaborative partners, for establishing and maintaining the programs of the Center. State University of New York Chancellor Robert King presented the awards at a dinner attended by 300 people.

BOCES Visit – Staff met with the Health/Risk/Management Coordinator for the Hamilton-Fulton-Montgomery BOCES to identify possible ways of utilizing interns to work on an Emergency Planning and Response project.

New Visions – Staff met with BOCES staff to discuss a new program to bring spatial information technology classes to high school juniors and seniors. Classes would be held in the SITC lab and would begin next year, depending on interest and enrollment.

College Hosts FMEI Meeting - The quarterly meeting of the Fulton-Montgomery Education Initiative (FMEI) took place. The 19-member consortium received presentations from FMCC the President and Vice Presidents on the programs of the college.

Small Business Owner Visit – Staff met with Mohawk Valley GIS owner about possible collaboration and summer academic program assistance.

NYS GIS Education Workgroup Galileo Award – Staff participated in the NYS GIS Education Workgroup meeting to outline criteria for the future *Galileo Award*, a map contest for all K-12 New York State students.

SUNY Cobleskill Liberty Partnership - Staff presented to 12 high school students from the State University of New York Cobleskill Liberty Partnership on as part of Cobleskill's Career Planning Day hosted by FMCC. Topics included Spatial Information Technology and the future job market.

Local Aviation Course Slated – The three owner-operators of Valley View Flight Academy visited SITC for orientation on the GIS classroom operations. In return for the flight academy's use of the classroom, Valley View staff will provide free instruction to students in the SITC Summer Camp.

Incorporation Meeting —Center and College representatives met with SUNY Albany to discuss incorporating operations at the college that would enable the Center to operate as a limited liability, forprofit entity.

Marketable Skills Action Team Requests Assistance – Staff met with the Marketable Skills Action Team to examine the skills, knowledge and abilities middle and high school students need in order to be successful in their careers.

SITC Collaborations - C.T. Male and staff visited Ulster County's GIS Coordinator and Town of Lloyd's GIS Coordinator to discuss a SITC / C.T. Male partnership for the delivery high quality GIS projects.

April, 2004

Emerging Industries Conference – Staff joined nine other college representatives from around the region in a seminar on emerging industries for the Capital Region. This event was designed to establish a "gap analysis" of our local workforce and how the region is positioned to accept high-skill, high-tech jobs such as those in the geospatial industry.

NEARC 2004 Conference Planning - Track chairs met in Lake George to select abstracts, sessions and panels for the fall conference.

Sharing the Foundation's Intern – An FMCC Electronic Media/Graphic Arts student started assisting SITC in maintaining NYSGISLIS association's website.

Tech Prep Presentation – The Director of the HFM BOCES Career & Technical Center and the SITC Director attended a Capital Region Tech Prep Practitioner's Conference where they presented the collaborative *New Visions in Geospatial Technology* program that will be offered to high school juniors and seniors at FMCC starting in September. Approximately 50 area educators and administrators attended the event. The Director and the Vice President and Dean of the College attended a joint meeting of the Capital Region Tech Prep Advisory Board and Technology Committee and discussed funding and programmatic issues surrounding their web-based data warehouse project.

Staff Visit to Northville Central School – SITC staff visited Northville Central School to begin discussions with a GLOBE (Global Learning Opportunities for a Better Environment) teacher-trainer. The three educators are collaborating to provide a July teacher training session on GLOBE's basic earth science protocols.

Fulton County Chamber of Commerce – Staff presented the progress of "Mapping Fulton County Businesses" to FCCC

Farm Bureau Annual Meeting –14 members of the Fulton County Farm Bureau Board of Directors and Chamber of Commerce Board members along with SITC staff attended the Bureau's annual Rural–Urban meeting. Discussion focused the use of GIS technology and precision agriculture.

College Family Night Includes GPS –FMCC hosted a "Family Fun Night" for students, faculty, and family members where twenty guests attended a demonstration on the basics of GPS.

Mapping Our World – Staff continues the **Mapping Our World** teacher-training program for nine FMEI (Fulton-Montgomery Education Initiative) K-12 teachers.

Analysis Report – President of Moran, Stahl & Boyer Consulting firm based in Duluth, GA has contacted SITC to help him prepare GIS tools for his proposed economic development analysis project for ten New York State Counties.

Real Estate Broker – A local real estate agency's owner, Louis Coletti, has shown interest in using GIS applications for his business. Staff showed how GIS can be utilized.

May, 2004

Fulton County Chamber of Commerce – Staff completed the "Mapping Fulton County Businesses" project: 6 maps, database and report.

Meeting with Science Coordinator – Staff met with Science Coordinator for Capital Region BOCES to discuss GLOBE (Global Learning Opportunities for a Better Environment) experiences and possibilities for coordination for the future.

Meeting with STEP Coordinator – Staff met with Coordinator of the Science and Technology Entry Program. Discussions began about offering a geospatial-mentoring program to students at local districts.

Project LIFT visits SITC Eight people from Project LIFT (Living Independently for Tomorrow) received a staff presentation on the technologies and careers involved in GIS, GPS and Remote Sensing.

NY GIS/LIS Association – Staff has updated the Association's website. One hundred twenty one GIS professionals have registered with the association as a result of SITC's design and hosting of the site (www.nysgislis.org).

SITC Student Aides Completes Internship -SITC's student aide for the Spring 04 semester, has completed her internship successfully.

Summit In Tech Valley – Staff joined FMCC President and local community representatives in attending the *Summit in Tech Valley*. Approximately 600 people from across the nation and outside the US attended and received an overview of the successes and progress of the 18-county consortium in attracting and growing high—tech business and industry.

Earth Science Network – Staff attended a meeting of the *ESNetwork*, a group of regional science teachers who collaborate on labs, field trips, and other earth science related items.

GLOBE Training to be Held at SITC, Northville H.S. – SITC Staff, a GLOBE Star Teacher, and the national GLOBE staff in Colorado will conduct a local K-12 teacher training program in July.

FMEI GLOBE Star School Wins GIS Company Recognition – Northville Central School has won the recognition of ESRI for their work in mapping local geography.

Communications—Technology Committee – The Director chaired the meeting of the Fulton County Chamber of Commerce. The Comm-Tech group is implementing a "Technology Tuesday" program.

Criminal Justice presentation – Staff gave a presentation to 42 Criminal Justice students. The presentation included GIS applications in Criminal Justice and an overview of GIS, GPS and Remote Sensing technologies.

Mapping Our World – Staff delivered and installed a computer workstation to Oppenheim-Ephratah School District, as part of SITC's efforts to expand GIS awareness to the K-12 community. This delivery marks the ninth school district to receive a computer from the Center.

SITC & FMCC Design Ad – A full-page advertisement has been designed, it will be placed in the *Mohawk Valley Heritage* magazine, which has an estimated circulation of 20,000. **Students Learn GPS During Adirondack Adventure** - The FMCC Outing Club experienced GPS technology first hand under staff supervision.

Meeting with Highland Geographic – Staff met with a local GIS firm to discuss partnering on ArcIMS projects.

New Visions – Staff visited Fonda-Fultonville High School to promote the HFM (Hamilton-Fulton-Montgomery) BOCES *New Visions in Geospatial Technology* program, which will allow high school seniors to attend 10 hours of classes per week learning Geospatial technology in the SITC Lab.

Shannon-Rose Design Maps – Shannon-Rose Design, a strategic communications company, has contacted SITC to discuss collaboration on high-quality mapping projects.

June, 2004

454 F ± − 9

NYS GIS Coordinating Body - Staff has been participating in a two-day planning meeting of this new Coordinating Body.

GE SchenectadyStaff attended a luncheon at General Electric with FMCC President and more than 40 Tech Valley Chamber of Commerce and County officials. GE and Tech Valley representatives focused on the Capital Region's economic development and prosperity.

Shannon-Rose Design – Staff has completed a GIS project for Shannon-Rose Design for high quality Digital Elevation Model views of Schuylerville, NY.

Lexington Center - A private, non profit agency that provides a wide range of services to disabled adults and children is interested in SITC's products and services. The Center is in the process of analyzing the distribution of their employees throughout Fulton County by village, city, town and county.

Keynote Speaker – The SITC Education Coordinator gave the Keynote address at the Ninth Annual Science Research Symposium. The Symposium consists of oral and poster presentations by students participating in their Science Research program.

4-H Days – Staff participated in the 4-H Agriculture Awareness Days (over 600 Fourth Graders attended) by teaching a hands-on GPS seminar for use in precision agriculture.

RPI Research Center –Staff visited the Rensselaer Polytechnic Institute (RPI) Darrin Fresh Water Institute in Lake George, NY. The two-hour meeting focused on the possibilities of a SITC-RPI partnership and roles in RPI's new Upper Hudson River Satellite Center, to study the hydrography of the Hudson and Mohawk Rivers.

NYS GIS/LIS Association Sponsorship – SITC became the official sponsor of the New York State Geographic Information System/ Land Information System Association. Nearly 200 GIS professionals joined this professional organization.

Website Changes – Staff has identified and added more than two-dozen state sponsored GIS data resources and added them to the SITC website.

GLOBE training posted – SITC, as a Global Learning Opportunities for a Better Environment (GLOBE) partnership manager, will be offering GLOBE training in all seven basic earth science protocols this summer.

Mohawk Valley Heritage Corridor Commission – Director of the MVHCC has accepted SITC's proposal to design and host a web site for his agency. The web site will incorporate GIS tools to better display and highlight the geography of the 130-mile by 70-mile corridor that New York State has identified for economic development and tourism.

City of Poughkeepsie – Staff joined Highland Geographic, to meet with City of Poughkeepsie officials about Web-based GIS opportunities. City officials showed a great interest in working with SITC.

Local NASA Explorer School Team Leader – A Team Leader of a local NASA Explorer School, Central Park Middle School in Schenectady, NY, visited SITC. Discussions centered on the NASA Explorer School Program and Mission Geography, and how SITC can support these initiatives. In addition, SITC will be hosting 19 middle school teachers in an upcoming Spatial Information Technology workshop, the culmination of a weeklong professional development institute focused on Mission Geography. Mission Geography links National Geography Standards with NASA's mission and vision, to create NASA based data, images, and lessons that engage students in active, hands-on inquiry, modeling of the scientific method, and giving the students new geographical understandings of the complex systems of the earth.

New Visions – Thirteen students and faculty from Fonda-Fultonville High School visited to learn more about the HFM (Hamilton-Fulton-Montgomery) BOCES **New Visions in Geospatial Technology** program.

FMEI Quarterly Meeting – Eighteen local area K-12 superintendents, administrators and chamber of commerce members attended the quarterly meeting of the Fulton-Montgomery Education (FMEI). The agenda included a presentation on the *New Visions in Geospatial Technology* program.

CORSE 2004 – SITC's Education Operations Coordinator and two HFM BOCES instructors attended the CORSE 2004 conference at Cayuga County Community College. CORSE 2004 is designed to teach teachers how to incorporate geospatial technology into their lesson plans.

USM/Stennis Visit – SITC Director visited Stennis Space Center and presented the *Partners in Leadership* award on behalf of the Chancellor of the State University of New York. The award was made in appreciation for NASA's support and collaboration in FMCC's academic, economic and workforce development program. He also completed the second phase of the *Return on Investment* TM instruction hosted at the University of Southern Mississippi. The ROI program will certify Mike to conduct studies and forecasts on various geospatial, technology and education programs to determine the cost-benefit factors of any given project.

July, 2004

478 + 1 × 1

Geospatial Technology Workshop – Twenty-two teachers from the Schenectady City School District visited SITC for a full day Geospatial Technology Workshop, conducted by faculty members. The visit was the culmination of a weeklong summer professional development workshop entitled Mission Geography presented by Rosemary Millham of NASA. Rita Moore, of Schenectady's Central Park Middle School, New York's fist NASA Explorer School, coordinated the event.

New Visions – Staff conducted bimonthly meetings with two FMEI (Fulton-Montgomery Education Initiative) teachers to continue curriculum planning for the upcoming school year's **New Visions** in Geospatial Technology pilot program.

Business Expo – FMCC trustee Mike Sampone, President Barry Weinberg and Director of IT Marc Ternullo joined Mike Flinton and Girk Cakmak in attending the first annual ESRI Business Expo in Chicago. Throughout the two days of presentation and networking the group focused on uses of ArcIMS software and opportunities for the College and the Center. ESRI owner and CEO Jack Dangermond introduced the FMCC group to Susan Wachter who oversees the GIS program at the Wharton School of Business at the University of Pennsylvania. Mr. Dangermond suggested the two institutions consider an internship program and offered his assistance and the resources of ESRI to support such an effort.

Spatial Information Technology Summer Camp – Education Operations Coordinator, Alex Chaucer and Linda Rockwood of *Mohawk Valley GIS* TM are hosting this year's five-day summer camp for teens in the SITC lab & classroom. The 15 hours of instruction include hands-on GIS, GPS and Remote Sensing lessons and activities including cartography, Internet-based programs, guest speakers and a visit to a local airport. Mike Flinton flew in a Cessna 172 to capture digital photos of GPS points identified by the students. This year's class includes thirteen students, grades 6-12 and one parent. The Camp ran for three hours daily.

SITC Supports Local Summer Camp – The Center has loaned 18 GPS units to the Central Park Middle School in support of the school's summer activities as New York's first *NASA Explorer School*. Two teachers and 18 female students will use the Magellan 315 GPS Receivers during their weeklong summer camp held in Schenectady, NY.

Technology Summer Camp Students Visit Center – Fourteen students of the FMCC Technology Camp visited the Center to film presentations by Mike Flinton and Alex Chaucer. The multimedia students are learning videotaping skills and used the lab as the scene to capture live demonstrations of GPS receivers, web-based presentations and audio-visual clips provided by the SITC staff.

USDOL Conference – The Director and two representatives from the local Workforce Investment Board (WIB) attended the United States Department of Labor (USDOL) Workforce Innovations Conference in San Antonio, Texas along with 2,500 professionals from across the U.S. Approximately 120 academic and workforce development professionals attended a future of the Geospatial industry presentation. The Director also met with 68 community college representatives hosted by USDOL Assistant Secretary for Employment & Training Administration to discuss federal funding issues and grant opportunities.

GLOBE Teacher Training Workshop – As a GLOBE (Global Learning Opportunities for a Better Environment) partnership coordinator, SITC contracted with a local GLOBE teacher and trainer for a certification workshop. Three teachers, including Alex Chaucer and Tim Hallock of SITC, participated and became certified GLOBE teachers.

Mobile Classroom for Agriculture Awareness – SITC's Education Operations Coordinator presented a session on Geospatial Technology in Agriculture to 14 local teachers as part of a regional Mobile Classroom for Agriculture Awareness. The Mobile Classroom program, coordinated by Fulton and Montgomery Counties' Cornell Cooperative Extension and 4-H, took area K-12 teachers on a tour of the agriculture-related businesses in Fulton and Montgomery Counties. The goal of this program is to give teachers awareness of regional agriculture so that they can relate the activities at these local businesses to their curriculum and lesson plans.

GPS Basics – Staff conducted 6-hour non-credited training session in GPS. The class was attended by 8 students, and included an overview of the history of the Global Positioning System, hands-on activities demonstrating initialization, landmark entry procedures, and navigating to a landmark.

Internet Mapping Interview – Staff met with a reporter from the Schenectady Gazette and provided information and a tour of the SITC's Internet Mapping system. This interview was part of our overall efforts to promote the newest technology added to the center.

Bard College —A Bard College representative utilized SITC equipment to print and laminate 27 maps to document their facilities to be is used as a planning tool for maintenance and expansion of their campus.

Environmental Science Class Tours SITC – Staff provided presentation on GIS, GPS and Remote Sensing to 9 Environmental Studies students was part of an ongoing effort to raise awareness of the technologies to students and faculty.

August, 2004

Senator Clinton Visits SITC – Senator Hillary Rodham-Clinton (D-NY) visited the college attending a public session in addition to a personal tour of the Center and program presentation by SITC staff. The Senator, along with 32 guests, was provided a program overview and demonstration of GIS applications in science, business and homeland security.

ESRI Conference – Staff attended the ESRI Education and International User Conference in San Diego where more than 13,000 professionals from over 100 countries discussed industry progress, projects and programs. Contacts for both our academic and entrepreneurial programs were made.

Pictometry Demonstration – SITC hosted a demonstration of oblique aerial photography and associated software applications by *Pictometry Visual Intelligence* [™] of Rochester, NY. Fulton and Montgomery Counties are interested in partnering with SITC to acquire federal funding for a two-year contract for Pictometry products and services.

Professional Development Day – SITC staff participated in staff development day by presenting a session on incorporating GIS into Your Curriculum for both new and veteran faculty. Six faculty members attended.

NY GIS/LIS Association - A SITC intern has updated the Association's website.

September, 2004

Heritage Corridor Commission Meeting SITC staff, met with the director and staff of the Mohawk Valley Heritage Corridor Commission to present a new web site.

K-12 Teacher Orientation Attended – SITC faculty member attended the Hamilton-Fulton-Montgomery Board of Cooperative Education Services teacher orientation for K-12 educators.

K-12 Receives GIS Orientation - Staff traveled to Wineelerville Union Free School District and presented an overview of GIS technology.

Dean Receives Orientation – SITC staff hosted orientation for the incoming Dean of Business, Technology and Health Professions. The time was spent discussing SITC's vision, mission, relationship to NASA and the college, and capabilities in GIS, GPS and Remote Sensing.

NYS GIS/LIS Association— Staff met with the officers of the NYS GIS/LIS Association to discuss proposed plans for the college and SITC to become the official sponsors of the statewide professional association.

State Commission Seeks SITC Support – The Mohawk Valley Heritage Corridor Commission has enlisted the support of the Center in aiding 12 – 15 graduate students assigned to work with the Commission in gathering location data and establishing local heritage information.

Tech Valley Coalition Presentation – Staff presented GIS business applications to representatives of 14 area Chambers of Commerce.

NEARC Conference – Four SITC staff, the College's Dean of Business, Technology and Health Professions, the Director of Institutional Research and a SITC student aide, attended Northeast ArcUsers Conference (NEARC) in Lake Placid New York. While there the SITC team staffed a vendor's exhibit, participated in presentations and took part in a variety of plenary and breakout sessions. Alex Chaucer, faculty member, organized the Education Track of the conference, presented K-12 teacher-training programs and supported Lyn Malone, author of ESRI's *Mapping Our World* textbook for K-12 teachers. SITC Operations Manager Liz Arabadjis presented a breakout session describing the activities of the Center and its collaborative efforts with Highland Geographic, Inc. Approximately 340 GIS professionals from around the northeast took part in the program. SITC was recognized by the conference organizers

for its part in helping to make the conference a success and for assuming a leadership role in many activities throughout the year.

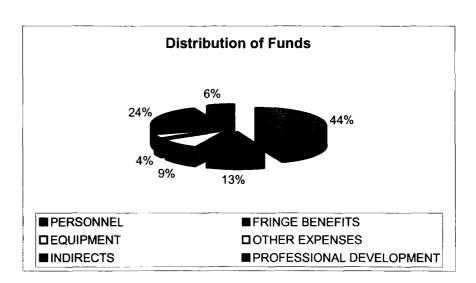
Center Exhibits at Business Expo – Two SITC staff members attended and manned the SITC vendor's booth at the first annual Fulton County Regional Chamber of Commerce & Industry Business Expo. One hundred sixty-four (164) registered guests attended the three-hour event and visited the vendor exhibits.

Fiscal Expenditures

This document provides a general overview and summary of the operational budget of the Spatial Information Technology Center at FMCC under Research Grant NAG 13-02053 concluding December 31, 2004.

NAG 13 - 02053 General Expenditures

NAG 13 – 02053 approved funds began in 2003 operations. Expenses on this award through September 2004 (including salaries and benefits through December 2004) amounted to \$656,808.55 and are detailed at right.



The following is a breakdown of NAG 13 – 02053 expenditures for the period of October 2003 through September 2004, (including salaries and benefits through December 2004).

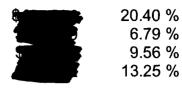
Indirect Rate (Facilities & Administrative)

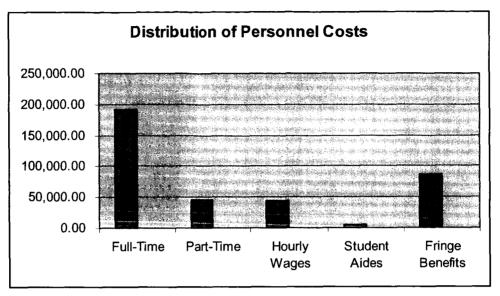
Indirect rate deducted by the college for this period is the considerably less than the expenditures, which continues the College's trend of claiming considerably less than the allowable 35.2% authorized by the federal government for this award.

Personnel Costs & Fringe Benefits

The personnel costs, including Fringe Benefits, totaled (Control of NAG 13-02053) expenditures. By staffing category and percentage, personnel expenditures included:

Full Time, Professional (3): Part Time (5): Hourly Wage (1): Fringe Benefits, all personnel:





Spatial Information Technology Center staff includes the following positions:

Director (Administrator)
Operations Coordinator (Administrator)
Technical Operations Coordinator (Faculty)
Education Operations Coordinator (Faculty)
Program Secretary (Clerical/Administrative Support)

The Director's position is a 12-month position, established at the equivalent of an academic dean, and reporting to the Vice President and Dean of the College.

The Operations Manager position, a college administrator, reports to the Director.

Technical and Operations Coordinators are Non-Teaching-Professional (NTP) Faculty positions serving on a 39-week contract for the academic year and on *per-diem* contracts to meet the requirements of the Center the remainder of the year.

Program Secretary is a 12-month clerical position.

Adjunct faculty, facilitators, consultants and similar positions are funded and reported in this document under the Contracted Services and Other Expenses categories of the report.

Fringe Benefits include the same compensation and benefits packages provided to other employees of the college who hold comparable positions, i.e. health care, retirement, etc.

Equipment

Hardware and software purchases totaled (9%), which included purchase of desktop computer systems for FMEI (Fulton-Montgomery Education Initiative) K-12 schools, upgraded printers for Center staff, computer memory, and an upgrade for the SITC lab for hosting GIS-based websites (see Final Property Report).

Professional Development/Travel

Professional development and technical competency remained integral parts of the Center's ability to continue operations. To support that philosophy, Center staff continued to be encouraged to seek and accept opportunities to maintain proficiency and upgrade their skills. Total expenditures for Professional Development represent 6.23% of the operating budget, or the continued in this category are associated costs for travel, lodging, meals, registration and reimbursements for expenses allowable under the grant and College guidelines. Specific examples of events and programs attended by staff included:

New York State Office for Technology – Quarterly Educational Forum meetings, New York State GIS Conferences, and presentation at the New York State informational forums in Syracuse and Albany, New York. A minimum of two staff members normally attends such events.

NEARC Conference – Most of the staff and an intern attended and presented the SITC program at the Northeast ArcUsers Conference in Lake Placid.

ESRI Conference – The Operations Manager attended the annual International Educators and User's Conference of software producer ESRI, in San Diego, CA. This is the fourth year Center professional participated. The four-day event attracted an estimated 13,000 professionals from more than 100 nations.

CORSE 2003 – The Center's Education Operations Coordinator and two K-12 educators of the Fulton-Montgomery Education Initiative were funded participants at the Conference on Remote Sensing in Education, CORSE, hosted by NASA-funded colleagues at Cayuga Community College's Institute for the Application of Geospatial Technology. The Education Operation Coordinator and teachers were able to network, present materials and participate in three days of discussion and demonstration of technology and GIS programs.

Curriculum/Faculty Development – The director and two faculty members frequently represented the program and college in a variety of in-state forums hosted by the State University of New York (SUNY) or private

institutions. These events continue to focus on issues of economic and workforce development, curriculum and program development, or general education. The benefits to the program became evident as we worked to incorporate GIS across the college curriculum and into the K-12 community.

FMEI/Teacher Training – The Fulton-Montgomery Education Initiative (FMEI) remains one of the cornerstone programs of this grant. The consortium continues to benefit from the professional development opportunities offered by SITC. Grant operations have funded teacher orientations, demonstrations and activities to introduce the concepts of GIS, GPS and Remote Sensing to K-12 teachers and administrators. A variety of activities took place that called for program staff to visit public schools and community events to discuss and demonstrate the technology. Costs incurred in those activities were charged to Professional Development where applicable.

Contracted Services

Contracted Services equaled or 1% of total costs.

A contract facilitator was once again hired to assist with the delivery of some of the K-12 programs of the Center, such as the SITC Summer Camp for Teens. These programs and informational forums have been highly successful in reaching non-traditional students. Also included were local and state level presentations to organizations such as the Science and Technology Entry Program (STEP) for minority middle and high school students.

Contracted services for equipment included an office copier, office campus printing of brochures for the SITC program and for the FMEI consortium.

Other Operational Expenses

General supplies, office supplies, curriculum materials, audio-visual aids and a variety of academic publications and periodicals represented a total of (3.8%) of total expenditures.

Final Property Report

Sponsoring Agency:	National Aeronautics & Space Administration
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John C. Stennis Space Center

Grant Number: NAG 13-02053

Vendor	Date	Qty	Amount
Dell	9/12/2003	3	
Dell	11/17/2003	1	
Dell	2/9/2004	2	
	Dell Dell	Dell 9/12/2003 Dell 11/17/2003	Dell 9/12/2003 3 Dell 11/17/2003 1

Thumbdrive	Staples	2/12/2004	4
IBM Think Pad	IBM	2/17/2004	1
Exhibit Booth 10'	Bokland	2/20/2004	1
IBM Think Pad	IBM	4/18/2004	1
Copier buyout	IKON	5/3/2004	1
Server, MS SQL 2000 processor	Dell	5/6/2004	2
Powervault 110/Poweredge Processors	Dell	5/6/2004	1
Smart Ups, 2200VA	CDW-G	5/21/2004	1
ArcIMS 4.x Std Ed Server CPU	ESRI	5/21/2004	1
Short Rack and switch box	Dell	5/21/2004	1
Memory Card, SimpleTech 256MB	CDW-G	8/6/2004	3
GPS, Magellan Meridian Gold	Wal-Mart	8/11/2004	20
Rotary Trimmer, Dahle Lrg Format	Engineer Supply	8/11/2004	1
Computers, Intel Pentium 4	Dell	9/16/2004	6
Vertical Blinds	Franklyn Co.	9/27/2004	4
Non-Grant Funds		8/12/2004	1



Total

This concludes the Fiscal Expenditures report for NAG 13-02053. Total expenditures for the award are \$656,809. Fulton-Montgomery Community College, including the Spatial Information Technology Center, has undergone an annual audit and financial management review during this reporting period and has been recognized as having sound fiscal programs and practices. Funds from each of the awards are professionally managed through the cooperation of the Institute for the Application of Geospatial Technology at Cayuga Community College, Fulton-Montgomery Community College in conjunction with the Director of the Spatial Information Technology Center.

FMCC/SITC Staff Report Form

NASA EDUCATION PROGRAMS STENNIS SPACE CENTER

Fulton Montgomery Community College/Spatial Information Technology Center

SUMMARY REPORT

FROM 01-Oct-2003 TO 30-Sep-04 (FY2004)

Number of Reports Entered: 59

Program Title: Fulton Montgomery Community College/Spatial Information Technology Center

ACTIVITIES/PRODUCTS/SERVICES:

<u>Choice</u>	<u>Number</u>
---------------	---------------

Meeting	10
Presentation	26
Product/Service	6
Tour of Facilities	5
Workshop/training	10
Nothing selected	2

PARTICIPANT COUNT TOTALS:

	Physical Presence	
	<u>Number</u>	Percentage*
A. DIRECT PARTICIPANTS:		
1. TEACHERS:		
Total K-12 and In-Service Teachers:**:	199	15.1
Teachers teaching grades K-4:	6	3.02
Teachers teaching grades 5-8:	66	33.17
Teachers teaching grades 9-12:	123	61.81
In-Service Teachers:	0	0
2. HIGHER EDUCATION FACULTY:		
Community College:	25	86.21
4 year undergraduate:	4	13.79
4 year undergraduate/graduate:	0	0

Totals:	29	2.2	
3. STUDENTS:			
K-4:	600	62.7	
5-8:	102	10.66	
9-12:	76	7.94	
Community College:	179	18.7	
4 year undergraduate:	0	0	
4 year undergraduate/graduate:	0	0	
Pre-Service Teachers:	0	0	
Post Doctoral:	0	0	
Totals:	957	72.61	
4. ADDITIONAL PARTICIPANTS:			
State Dept of Ed officials:	3 .	2.26	
Local K-12 Education officials:	64	48.12	
University/CC officials:	18	13.53	
Federal government officials:	1	.75	
State government officials:	6	4.51	
Local government officials:	2	1.50	
Professional organizations:	0	0	
Business sector representative:	19	14.29	
Community representative:	0	0	
Civic group:	3	2.26	
Parents:	0	0	
Others:	17	12.78	
Totals:	133	10.09	
Total of All Direct Physical Presence Participants:	1318	100	
Total of All Direct Distance Learning Participants:			

TOTAL OF ALL DIRECT PARTICIPANTS: (From A)	1318	1.56	
PARTICIPANTS: B. EDUCATION COMMUNITY:			
K-12 Teachers:	1	.33	
K-12 Students:	0	0	
Higher Ed Faculty:	0	0	
Higher Ed Students:	0	0	
Other (Administrators, Parents, etc.):	300	99.67	
TOTAL OF ALL EDUCATION COMMUNITY PARTICIPANTS: (From B)	301	.36	
C. GENERAL PUBLIC/MEDIA AUDIENCES:			
	Number of Participants	Percentage •	
Conferences/Conventions/lectures/mus eums/hooths/etc:	1960.00	2 37	
Estimated Newspaper/Magazine/Audiences:	56000	67.79	
Estimated TV/Radio Broadcast Audiences:	0	18.16	
Estimated TV/Radio Broadcast Audiences: Estimated CD-ROM Users:	0 0	18.16 0	
	-		
Estimated CD-ROM Users:	0	0	

values for at least one of the four Teacher subcategories was entered.

There was 1 reports in which the "Total Number of K-12 Teachers: Physical Presence" was entered, but values for none of the four Teacher subcategories was provided.

MATERIALS DISTRIBUTED AND DEMONSTRATED:

GRAND TOTAL OF ALL PARTICIPANTS:

<u>Statement</u>	<u>Total</u>	<u>Average</u>	No Answer
Total Number of NASA educational materials (videos, publications, wall posters,not patches, pencils, bookmarks, etc.) distributed:	0	0	59

100

84224.00

^{*} Percents with in a category are calculated based on the total number of participants in that category. Percents of the total participants in a category (e.g.: Total Faculty, Total Students, etc) are based on the number of the sub total of all direct/outreach participants.

^{**} Total Teachers is computed using the subcategory values (K-4, 5-8, 9-12, In-Services) when the "Total Number of K-12 Teachers" has not been entered; else the entered value is used. Hence, "Total Teachers" may be less than, equal to, or greater than the sum of the four Teacher subcategories. A teacher may teach more than one grade; also, participants may not have entered all required "Teacher" values.

There were 15 reports in which the "Total Number of K-12 Teachers: Physical Presence" was not provided, although

.

Number of NASA individual educational materials demonstrated by presenter/s during the program:

0

0

59

Report generated on: 03-Dec-2004

Report Of New Technology/Inventions NAG 13 – 02053 (Required by New Technology or Patent Rights Clause)

Name and Address of Contractor –

Fulton-Montgomery Community College Attn: Mr. John Jablonski 2805 State Highway 67 Johnstown, NY 12095

- Contract/Grant Number NAG 13 02053
- 3. List each New Technology/Invention by Title and Innovator's Name.
- 4. Under the NASA FAR clauses in your contract, you have the right to retain title of the intellectual property developed under this NASA contract. The FAR clauses stipulate that you must elect whether or not you wish to retain title of the intellectual property by notifying NASA, in writing, within 2 years of disclosure of the technology. In addition, once you have elected to retain title to a technology, you must file an initial patent application within 1 year after election of title.

In accordance with FAR Section 52.227-11 (2), an election to retain title to a reported technology will be submitted to the Federal Agency in writing within 2 years of disclosure.

______ We wish to retain title to the subject technology at this time.

_____ We do not wish to retain title to the subject technology. We understand that the rights to this technology will revert to NASA. We give permission for NASA to take rights to this technology immediately.

5. List subcontracts containing New Technology or Patent Rights Clause (if "None", so state). Provide name, address and subcontract number.

6. Certification is hereby made to the following: (check "a" or "b")

_____ a. New Technology/Inventions listed above are all of the items required to be reported.

X b. No New Technology/Inventions were made under the contract/grant identified above.

Signature & Contact Information

<u>John Jablonski</u>

Name & Title of Authorized Contractor Official

Original signed (separate copy)

Signature

Date: December 1, 2004

Signature Date 12 28 80

John Jablonski, Director (Acting)

Spatial Information Technology Center

For further information or questions pertaining to this report, please contact:

John Jablonski, Director (Acting) Spatial Information Technology Center Fulton-Montgomery Community College 2805 State Highway 67 Johnstown, NY 12095

Ph: 518-762-4651, ext. 8003

Fax: 518-762-6209

Email: jjablons@fmcc.suny.edu

Web Page: www.sitc.cc